

Abstract of the Disclosure:

A permanent magnet type rotating electrical machine capable of reducing core loss due to armature
5 reaction magnetic flux and making an effective use of
reactance torque. A permanent magnet type rotating
electrical machine comprising a first rotor core
containing a permanent magnet and a second rotor core
having a flux barrier without magnet, wherein a
10 concave portion is provided between poles in the
vicinity of outer surface the rotor core containing
the permanent magnet and the length of the gap in the
magnetic path on the q-axis side is increased to
ensure easy passage of the magnetic path of the
15 armature reaction magnetic flux on the reluctance
torque rotor side, whereby a permanent magnet type
rotating electrical machine delivering a large output
can be obtained by making an effective use of
reluctance torque.

[Selected Figure] Fig. 1